MEETING SUMMARY
WATER RESOURCES ADVISORY COMMISSION (WRAC)
KISSIMMEE BASIN WATER SUPPLY PLAN (KBWSP) UPDATE
REGIONAL WORKSHOP
South Florida Water Management District
Environmental Learning Center, Disney Wilderness Preserve
2700 Scrub Jay Trail, Kissimmee, Florida 34759
January 29, 2004

Harkley Thornton – Chairman of Kissimmee Basin Water Supply Plan and SFWMD Governing Board Member was unable to attend.

Attendees:

WRAC Members:

Joe Collins	Harry Cronin

WRAC Alternates:
Doug Shaw

Interested Parties:

Ernest Abney	Clell Ford	Ted Sanders
Jeff Adkins	Dick Galantowicz	Herb Stangland
Chris Beatham	James Hayes	Rob Teegarden
Debbie Bradshaw	Dale Jenkins	Missy Washington
Nicole Buckland	Bruce Lafrenz	Brian Wheeler
Barry Campbell	Brian Magic	Theresa Woody
Rick Coleman	Tamara McBride	
Anil Desai	Ted McKim	
Steve Elias	Gina Ralph	

Staff:

Bridgett Duckworth	David Gilpin-Hudson	Keith Smith
Tom Genovese	Jennifer Jorge	Rick Smith
Bill Graf	Michelle Pearcy	Chris Sweazy
John Mulliken	Chris Carlson	

1. Welcome and Introductions, by John Mulliken, Acting Director, Water Supply Department, SFWMD.

The meeting was called to order at 12:40 p.m.

Mr. Mulliken reviewed the past meeting's progress and explained what was to be accomplished at this second meeting on water supply planning.

2. Action Items from Previous Workshop, by Chris Sweazy, KBWSP Project Manager, SFWMD.

Mr. Sweazy summarized the action items from the meeting held on November 19, 2003. The Draft Chapter 1 was distributed and comments solicited.

The Kissimmee Basin Water Supply Plan proposed update process and changes to the process schedule were reviewed. This schedule will be made available on the District web site.

Today's Agenda was revised and Item 7 was moved to follow Item 2.

7. Hydrologic Investigations, by Steve Anderson, Lead Hydrogeologist, SFWMD.

Mr. Anderson presented an overview of the District's exploratory drilling program, Floridan aquifer interaction study, and recent work with the United States Geological Survey (USGS). The location of the District drilling and monitoring efforts within the Kissimmee planning area was provided. The purpose and scope for the surficial/Floridan Aquifer interaction study were reviewed. The USGS cooperative studies were explained. Funding partners; the City of Kissimmee, Orange County, Polk County, Reedy Creek Energy Services, The Nature Conservancy, St. Johns River Water Management District (SJRWMD), Southwest Florida Water Management District (SWFWMD), and the U. S. Geological Survey were all thanked for their assistance in accomplishing the described research efforts.

3. Introduction to KBWSP Ground Water Modeling for 2005, by Jeff Giddings, Sr. Supervising Hydrogeologist, SFWMD

The status of the groundwater models was provided. Additional packages that are to be added to the modeling effort were explained and include wetlands; horizontal flow barrier; SIGMA; multiple wells; hydrologic diversions; and RDF packages.

The presentation provided information on GIS model input data sets and model calibration.

The Kissimmee Basin - East Central Florida Groundwater Model Plan was presented. The new model is a modification of the previously developed ECF model created by the St. Johns River Water Management District. Major changes from the current ECF model were reviewed. Information on the model dimensions, model layering and hydrogeologic data was provided.

Predictive runs will allow the District to evaluate:

- Sinkholes potential;
- Adverse lake impacts;

- Springs flow changes;
- Saline water movement;
- Wetlands drawdowns; and
- Impacts to adjacent users.

The base case predictive runs are for a 30-year simulation period (1971-2000). The simulation will compare existing to future conditions and thereby identify potential impacts. Maps showing boundary conditions, locations of observation wells, and locations of pumping wells were shown. Future runs will represent 2000 existing conditions and 2025 future demands.

Mr. Giddings and Mr. Sweazy answered questions on this issue. Information on calibration and verification was provided. This subject will be covered at future workshops. Peer review committees meet periodically to discuss this issue and Mr. Sweazy invited anyone who would like to join in these meetings to let him know.

4. 2000 and 2025 Demand Projections, by David Gilpin-Hudson, Sr. Supervising, Planner, SFWMD

Demand projections are crucial to the development of a water management plan. Demand categories were listed as well as a map showing the planning area. The presentation showed population projections. There is an overall growth rate in water use in Orange, Osceola, Polk, Highlands, Glades and Okeechobee counties of 59%. The population growth rate is estimated to be 100% for the years 2000-2025 for counties in the northern part of the basin.

Agricultural crop projections and the agricultural acreage projections were discussed. Acreage projections were based on acreage trends, industry knowledge, and agricultural plans. Feedback on sod farms and pasture was provided by Joe Collins. Overall acreage and water trends were provided.

The categories used in estimating future water use are:

- PWS & DSS – Utilities and municipalities;
- Commercial and Industrial – county planning departments;
- Golf courses – National Golf Foundation;
- Thermoelectric –Liaison with FPL; and
- Ag acreage – IFAS, Ag Industry.

A question and answer session was held. A question on estimating the need of water for the environment was asked. The environmental demands are not ignored and are included in the water supply plans as performance measures. A discussion was held on performance measures. It was decided to address this issue at the March workshop. A question was raised regarding coordination of the water supply plan and other ongoing District projects. This will also be discussed at the next workshop.

5. Reclaimed Water Master Planning by Chris Sweazy, Lead Planner, SFWMD

The purpose of the plan is to establish baseline understanding of individual reuse systems; identify future plans of reclaimed water providers; provide insight on future demand and availability; and demonstrate effectiveness of reuse options in meeting future demands.

The study area was limited to Central Florida and for reclamation systems producing average flows of 0.1 million gallons daily (mgd) and greater. Information on project tasks, baseline information and identifying customers was provided.

Presentation on assess supply and demand:

- Account for all reuse and disposal;
- Review peak demand occurrences; and
- Analyze existing and potential customers use.

Supplemental sources were analyzed to identify potential alternative sources for reuse augmentation. A chart showing existing and projected estimated reuse and disposal was reviewed.

The estimated reuse and disposal of water was shown for average flow to be 120.87 mgd in 2001 and was estimated to be 231.24 mgd in 2025. These reuse amounts, once confirmed, are proposed to be modeled in the groundwater flow model. Alternatives for the application of reuse will also be evaluated in the model.

In the report several recommendations on the location and use of reclaimed water would be made for central Florida. Among the proposed recommendations are:

- Location of potential new connections;
- Demand management options
- Supplemental resource;
- Benefits of recharge vs. potable replacement; and
- Effectiveness of reclaimed water in meeting future demands.

A lengthy discussion on reuse benefits occurred between staff and stakeholders. Mr. Sweazy estimated that the draft report would be completed in early summer, 2004. The most beneficial reuse was defined on a downward scale as “Direct recharge to the aquifer through injection; direct replacement of use that would otherwise use the Floridan aquifer; application of wastewater to areas of highest recharge to the Floridan; application of wastewater to areas of lower recharge or discharge to the Floridan; and discharge to surface water bodies.” Mr. Mulliken provided an example of golf courses using reuse water as beneficial reuse as it replaced water that would otherwise come from the groundwater system.

8. Water Conservation Approach and Opportunities by Bruce Adams, Water Conservation Officer, SFWMD.

Mr. Adams presented information on a new approach by the District to water conservation. The principles that will be applied were reviewed. The District is proposing to focus on tailoring the conservation programs to individual utilities. The guidelines apply to agricultural and urban water use. All sources should be used efficiently. Mr. Adam's presentation showed the current SFWMD conservation efforts and the consumptive use permit requirements for water conservation for water utilities.

The District is evaluating water conservation potential by determining current/past utility conservation practices; analyzing major water uses and characterizing use patterns by service area and per capita trends. Information on potential water and cost priority application was provided.

A question and answer session on low volume irrigation, groundwater testing, regulatory permitting, salt-water detectors, mobile irrigation labs, and other conservation issues was held.

6. Draft Documents - Chapter 1 (Discussion) and Chapter 2 (Distribution)

Chris Sweazy, Lead Planner, SFWMD identified that the appendix on Rainfall Analysis was available as a handout and proposed discussion of the appendix at the March meeting.

A handout of Chapter 2, Water Demand, was provided and also proposed for discussion at the March meeting.

Chapter 1 was reviewed by Ms. Michelle Percy. She read from Chapter 1, Plan Objectives, and asked for comments from stakeholders. Wordsmithing for the "Objectives" continued and Ms. Pearcy and Mr. Gilpin-Hudson noted the suggested changes. Revisions to the language and final approval of the changes will occur at the next meeting.

9. Public Comment - None.

10. Wrap-up/ Action Items
Discuss related projects to the KBWSP and resource protection criteria at the next meeting or when possible.

11. Next Meeting Date, Location and Agenda. Ms. Pearcy announced that the next meeting was proposed for Wednesday, March 17, 2004. Proposed for the morning session is a discussion of coordination among other District projects and the KBWSP. Additional modeling discussion and other evaluation efforts are proposed for the afternoon session. The location of the Kissimmee Basin Water Supply Planning

meetings will be alternating between Kissimmee, Okeechobee and Sebring. The next meeting will be in Sebring or the Okeechobee area. An agenda will be furnished to all stakeholders.

11. Adjournment at 12:45 p.m.

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Paula Moree
District Deputy Clerk